

Truro Energy Committee

Meeting Packet

May 9, 2022

Truro Climate Action Committee – Summary of Goals 2022/23

Truro Climate Action Committee Goals: 2022/23

CAC Goals – for EC Consideration

Definitions of Net Zero Carbon

Truro Climate Action Committee

Summary of Goals 2022/23

1. Develop a Climate Action Plan for Truro

Draft a Climate Action Plan that will inform the municipality, residents, and businesses on actions to address climate change by obtaining input and review from Select Board, relevant boards and committees, residents, and businesses.

2. Promote EV Charging Stations for Businesses

Educate business owners on the benefits of EV charging stations and on the EV charger installation process via information sheets and direct mailing.

3. Propose a Climate Change Agent for Truro

Draft job description and submit to Town Manager, Health/Conservation Agent, DPW Director, Select Board, and other appropriate board/committee chairs for review and input.

4. Outreach

In-person information table at COA, Library, and other town buildings and events.

5. Create or Improve Existing CAC Webpage

Webpage development to make a user-friendly resource for climate information.

6. Meet with Boards/Committee to Identify Climate Actions

Conduct workshops with appropriate boards and committees to identify climate change responsibilities and decision-making

7. Recommend a Whole Government Approach

Recommend that town government implement a whole government approach to addressing climate change

8. Work with Cape Light Compact

Work with Cape Light Compact to promote energy audits

9. Inform Select Board and Municipal Managers

Inform Select Board and Municipal Managers about state roadmap, laws, and codes

10. Write Articles for Truro Talks

Write educational/information articles about addressing climate change in each issue of Truro Talks

11. Adopt Specialized Opt-In Energy Code

Inform and engage citizenry, Town Government, other boards, and committees to participate in the stretch code adoption process and adoption of specialized opt-in code

12. Make Article 17 of the 2020 Warrant Binding

Educate and Engage citizenry, Town Government, other boards, and committees to make Article 17 of the 2020 Town Meeting Warrant binding policy at the 2023 Town Meeting



Truro Climate Action Committee

24 Town Hall Road, PO Box 2030

Truro, MA 02666

Email: climateaction@truro-ma.gov

Website: <https://www.truro-ma.gov/climate-action-committee>

Truro Climate Action Committee Goals: 2022/23

1. Goal: Develop a Climate Action Plan for Truro

Description: Draft a Climate Action Plan that will inform the municipality, residents, and businesses on actions to address climate change by obtaining input and review from Select Board, relevant boards and committees, residents, and businesses.

Assigned to: Carol, Fred, Rebecca

Resources Required: Select Board, Town Manager, municipal department heads, board and committee members, residents, businesses, Cape Cod Commission

Estimated Completion: Draft completed January 1, 2023, or earlier

Key Performance Indicator: 1st draft completed by August 2022, Final draft completed and submitted to SB by January 2023

2. Goal: Promote EV Charging Stations for Businesses

Description: Educate business owners on the benefits of EV charging stations and on the EV charger installation process via information sheets and direct mailing.

Assigned to: Bob, Rebecca

Resources Required: Town Hall to provide mailing lists for either print or electronic mailer.

Estimated Completion: Email May 15, follow up with businesses June 15

Key Performance Indicator: Two charging sites installed by end of 2022

CAC Goals 2022/23

3. Goal: Propose a Climate Change Agent for Truro

Description: Draft job description and submit to Town Manager, Health/Conservation Agent, DPW Director, Select Board, and other appropriate board/committee chairs for review and input.

Assigned to: Rebecca, Carol

Resources Required: Town Manager, Health/Conservation Agent, DPW Director, Select Board, and other appropriate board/committee chairs

Estimated Completion: Fall 2022

Key Performance Indicator: Draft of position completed by CAC

4. Goal: Outreach

Description: In-person information table at COA, Library, and other town buildings and events.

Assigned to: Rebecca, all

Resources Required: Banner/sign, printed CAC climate change information

Estimated Completion: On-going

Key Performance Indicator: Increase subscribers by ~50% from baseline of 72 subscribers in January 2022 to ~150 by end of 2022

5. Goal: Create or Improve Existing CAC Webpage

Description: Webpage development to make a user-friendly resource for climate information.

Assigned to: Carol

Resources Required: Webpage design, webpage administrator

Estimated Completion: December 2022

Key Performance Indicator: Feasibility research conducted by December 2022

CAC Goals 2022/23

6. Goal: Meet with Boards/Committees to Identify Climate Actions

Description: Conduct workshops with appropriate boards and committees to identify climate change responsibilities and decision-making

Assigned to: Carol, All

Resources Required: Board of Health, Building Committee, Council on Aging, Economic Development Committee, Finance Committee, Local Comprehensive Plan Committee, Pamet Harbor Committee, School Board, Walsh Property Community Planning Committee, Zoning Board of Appeals

Estimated Completion: On-going

Key Performance Indicator: Meet with a minimum of six committees by December 2022

7. Goal: Recommend Whole Government Approach

Description: Recommend that town government implement a whole government approach to addressing climate change

Assigned to: Bob, Fred

Resources Required: Select Board, Town Manager, appropriate department heads to review and determine how to implement

Estimated Completion: June

Key Performance Indicator: Five committees support this approach

Added to LCP , SB, and Town Manager goals or otherwise codified to be Town Policy

CAC Goals 2022/23

8. Goal: Work with Cape Light Compact

Description: Work with Cape Light Compact to promote energy audits

Assigned to: Bob, Rebecca

Resources Required: Cape Light Compact

Estimated Completion: On-going

Key Performance Indicator: Increase requests for audits of residential buildings from 23% as of January 2022 to 50% by December 2022

9. Goal: Inform Select Board & Municipal Managers

Description: Inform Select Board and Municipal Managers about state roadmap, laws, and codes

Assigned to: Bob, Fred

Resources Required:

Estimated Completion: June 2022

Key Performance Indicator: TBD

10. Goal: Write Articles for Truro Talks

Description: Write educational/information articles about addressing climate change in each issue of Truro Talks

Assigned to: Carol, All

Resources Required: CAC members

Estimated Completion: On-going

Key Performance Indicator: Article written every month

CAC Goals 2022/23

11. Adopt Specialized Opt-In Energy Code

Description: Inform and engage citizenry, Town Government, other boards, and committees to participate in the stretch code adoption process and adoption of specialized opt-in code

Assigned to: Bob, All, EC

Resources Required: EC commitment, several Truro Talks articles, SEMASS green communities' coordinator assistance

Estimated Completion: July 1, 2022, draft finalized, January 1, 2023, implementation starts

Key Performance Indicator: CAC and SB submit comments during public comment period before July 1 deadline (TBD by DOER) or after the proposed draft is released, whichever comes first. Truro opts in to specialized code

12. Goal: Make Article 17 of the 2020 Warrant Binding

Description: Educate and engage citizenry, town government, other boards, and committees to make Article 17 of the 2020 Town Meeting Warrant binding policy at the 2023 Town Meeting

Assigned to: Bob, Rebecca, All

Resources Required: EC commitment, several Truro Talks articles, TPTRA outreach

Estimated Completion: September 2022

Key Performance Indicator: 2023 Warrant Article

4 proposed Climate Action Committee 2022 Goals deemed more appropriate for EC to adopt

(Or take any action thereof)

1) Rooftop solar and PV at the Transfer station: EC and the Town to define next steps for PV at Transfer station. -This is ongoing involving Mark and Bob

2) Start an open public solicitation to Solar companies for a Solar feasibility cost, ROI and payback for all municipal buildings. Include list of buildings and addresses furnished by EC or CAC?

3) Walsh property net zero. Actionable item for 2023 ATM? Requested by Bob

Fred Gaechter Co-Chair Walsh Committee Alternate CAC and I spoke

We agreed that it is too early in the Walsh property process to define development goals for the property

However, it is fine for the EC to draft a heads-up letter about what the EC would like to see for any development on the property.

(Net zero for all buildings, zoned net zero etc.)

It is appropriate to draft a letter with Tentative goals within the next couple of months, submit it to the Walsh committee we can revisit it with the WPC in the fall.

A fall check-in or meeting would enable the EC and/or WPC to explore options for the EC's Walsh goal.

It would also leave ample time to pursue a warrant article in 2023.

4) Establish a dedicated revolving fund to use FUTURE net metering credits from the credits or buybacks above generated by municipal buildings to municipal building energy efficiency. Anecdotally. Darrin and Jarrod have suggested any money from Tstation go toward a climate Agent position (w/

DPW) Get the Town commit to whole government approach to climate change codified in enforceable document (LCPC?)

Currently in CAC work plan **Adopt the opt-in specialized stretch code yet to be finalized** The Following are in the CAC work plan

Get the Town commit to whole government approach to climate change codified in an enforceable document (LCPC?)

Sample language approved by CAC in November 2021 Final version approved by CAC 4/14/22

Whole Government Approach:

The Town of Truro recognizes that effective climate leadership requires the integration of climate change mitigation and adaptation into daily operations, decision-making, and planning for our municipality. The Truro Town government is committed to taking the lead on implementation of this approach and the integration of climate change mitigation and adaptation throughout all Town Departments, boards, and committees and will focus on three specific areas to achieve this:

Governance

Integrate climate change mitigation and adaptation goals, metrics, and evaluation criteria into Town planning and administration, including staff and department training, evaluations, and budgeting.

Education

Work with educators, parents, students, the School Board, and the State to bring climate education curricula into schools and student activities.

Resilience

Prepare businesses and residents for the adverse impacts of climate change through education and preparedness planning.

Departmental Responsibilities.

One of the first objectives is to align Town Departments' responsibilities with the goals of the Climate Action Plan and identify any areas where municipal activities may be in conflict with the goals of the Plan.

This process will result in the incorporation of a climate strategy into the goals of every Town Department's operations and planning."

6) How do we make article 17 of the 2020 Warrant binding in 2023 ATM?

Article 17 2020 passed by the Town^[L]_[SEP]

“Be it resolved that the Town of Truro recognizes that the climate emergency is leading to rising seas, deadly storms, floods, dangerous heat waves, prolonged droughts, wildfires, ocean warming and acidification, and other adverse consequences. This poses a threat to the health, safety, and economic security of the Town and its residents. The Town of Truro therefore adopts as its policy the objective of reducing Truro’s net greenhouse gas emissions to zero by 2050 at the latest and requests the Select Board to direct all officers and departments of the Town to take such immediate measures within the scope of their respective responsibilities and authority as may be necessary and prudent to implement this policy, or to take any other action relative thereto.

Requested by the Climate Action Committee

Climate Action Committee Comment: This policy builds on climate resolutions passed at the 2013 Annual Town Meeting (“The citizens of Truro commit ourselves to meeting our individual and collective responsibility in the face of the increasing climate crisis by adopting energy efficiency and conservation practices”), and at the 2019 Annual Town Meeting, establishing a Town of Truro Climate Action Committee.

Reaching net zero emissions is defined as eliminating all greenhouse gas emissions by all known means, and capturing the remaining emissions by various means, such as planting species known for their ability to capture and sequester these emissions.

Achieving net zero emissions will require all sectors of our community—government, businesses, and citizens—to work together toward that goal.

Select Board Comment: This was submitted by the Climate Action Committee for consideration at Town Meeting and can be considered by Town Meeting as a non-binding advisory vote.”

End Article 17 from 2020 ATM

The committee did not submit this as a non binding article

Article 53 prepackaged standards or definitions of Net zero carbon building

SHIFT TO ZERO

<https://shiftzero.org/what-is-zero-net-carbon-building/>

What is Zero Carbon Building?

Building decarbonization—the elimination of greenhouse gas emissions caused by buildings—is central to shift! Zero’s mission, but what does that mean? Carbon dioxide and other greenhouse gas emissions related to buildings fall into two categories: (1) “operational carbon” emissions associated with heating, cooling, and operating buildings, and (2) upfront “embodied carbon” emissions associated with the manufacture and transport of building materials and the construction of buildings themselves. Our definition of zero carbon building encapsulates both.

The first step is to maximize energy efficiency so that we dramatically reduce the energy required to operate our buildings in the first place. As we make those energy efficiency improvements, we need to make material selection and building design decisions that minimize embodied carbon. We also need to eliminate the burning of fossil fuels onsite, and recognize that by electrifying buildings we can leverage at the building level the ongoing decarbonization of the larger electricity grid. Finally, our zero carbon buildings will run on 100% renewable energy, either generated onsite or procured offsite.

Steps to a Zero Carbon Building

STEP 1:



Maximize Energy Efficiency

- Efficient building envelope
- Efficient systems and appliances
- Operations and maintenance
- Change in user behavior

STEP 2:



Minimize Embodied Carbon

- Prioritize materials that use less carbon in production and transportation

STEP 3:



Eliminate Fossil Fuels

- Electric space heating, hot water systems, and appliances
- No combustion of fossil fuels

STEP 4:



Use Only Renewable Energy

- Maximize on-site renewable energy generation where practical
- Procure off-site renewable energy that is additional, local, equitable, and legally assigned to the building.

<https://www.arup.com/perspectives/publications/research/section/net-zero-carbon-buildings-three-steps-to-take-now>

International Energy Agency pg. 9 (I'll get the exact report title)

1 A zero-carbon-ready building is highly energy efficient and either uses renewable energy directly or uses an energy supply that will be fully decarbonised by 2050, such as electricity or district heat.

This is somewhat similar to whose definition does not include the words highly energy efficient

World Green Building Council (the LEED people)

<https://www.worldgbc.org/thecommitment>

- **Existing buildings:** reduce their energy consumption and eliminate emissions from energy and refrigerants removing fossil fuel use as fast as practicable (where applicable). Where necessary, compensate for residual emissions.
- New developments and major renovations are built to be highly efficient, powered by renewables, with a **maximum reduction in embodied carbon** and compensation of all residual upfront emissions.